INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015

(317) 232-8603
(800) 451-6027
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PART 70 OPERATING PERMIT RENEWAL
OFFICE OF AIR QUALITY

NUCOR Vulcraft Group - St. Joe Division
6610 County Road 60
Saint Joe, Indiana 46785

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T039-15749-00027	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: **July 18, 2003** Expiration Date: **July 18, 2008**

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary steel joist and deck fabrication plant for the building construction industry.

Responsible Official:	General Manager/Vice President
Source Address:	6610 County Road 60, Saint Joe, Indiana 46785
Mailing Address:	P.O. Box 1000, Saint Joe, Indiana 46785
General Source Phone Number:	(260) 337-1800
SIC Code:	3441 and 3444
County Location:	DeKalb
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Minor Source, under PSD Major Source under Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

(a) One (1) joist fabrication line including a GMAW welding area and two (2) dip-and-drain paint tanks, identified as Super Long Span Line, constructed in August 1991, with a maximum production capacity of ten (10) tons of steel joists per hour.

(b) One (1) joist fabrication line including a GMAW welding area and two (2) dip-and drain paint tanks, identified as Long Span Line, constructed in September 1974, with the original solvent-based paint dip tanks replaced with water-based paint dip tanks in January 1993, with a maximum production capacity of ten (10) tons of steel joists per hour.

(c) One (1) joist fabrication line including a GMAW welding area and a vacuum-assisted flow coater, identified as Middle Span Line, constructed in March 1972, with the original solvent-based paint dip tanks replaced with a water-based flow coater in October 1996, with a maximum production capacity of ten (10) tons of steel joists per hour.

(d) One (1) joist fabrication line including a GMAW welding area and a vacuum-assisted flow coater, identified as Short Span Line, constructed in March 1972, with the original solvent-based paint dip tanks replaced with a water-based flow coater in September 1994, with a maximum production capacity of nine (9) tons of steel joists per hour.

(e) One (1) joist fabrication line including a GMAW welding area and two (2) dip-and drain paint tanks, identified as Combo Line, constructed in October 1985, with the original solvent-based paint dip tanks replaced with water-based paint dip tanks in September 1994, with a maximum production capacity of twelve (12) tons of steel joists per hour.

(f) One (1) bridging fabrication line including a GMAW welding area, two (2) dip-and drain paint tanks, and a vacuum coater, identified as Bridging Line, with the welding area and solvent-based paint tanks constructed in March 1972, with the original solvent-based paint tanks replaced with water-based paint tanks and a vacuum coater added in December 1992, with a maximum production capacity of ten (10) tons per hour.

(g) One (1) deck fabrication line including three (3) double-side roll coaters, three (3) electric infra-red drying ovens, and two (2) airless spray edge coaters, identified as Deck Line, with two (2) roll coaters constructed in October 1977 and a third roll coater and two (2) airless spray edge coaters constructed in February 1998, with a maximum production capacity of forty (40) tons of steel deck per hour.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

(a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.[326 IAC 8-3-2][326 IAC 8-3-5]

(b) The following equipment related to manufacturing activities not resulting in the emissions of HAPs: welding equipment.[326 IAC 6-3-2]

(c) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.3 Enforceability [326 IAC 2-7-7]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.4 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.5 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort or any exclusive privilege.

B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

(a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:

(1) Enforcement action;

(2) Permit termination, revocation and reissuance, or modification; or

(3) Denial of a permit renewal application.

(b) Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act.

(c) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(d) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

B.9 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.

(c) A responsible official is defined at 326 IAC 2-7-1(34).

B.10 Annual Compliance Certification [326 IAC 2-7-6(5)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and

(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ, may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.11 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs), including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

(b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contribution to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.12 Emergency Provisions [326 IAC 2-7-16]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ and the Northern Regional Office, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

Northern Regional Office
Telephone Number: 1-800- 753-5519 or (219) 245-4870
Facsimile Number: 219-245-4877

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(9) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.13 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

(b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

(c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

(d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;

(2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;

(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and

(4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.

(e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).

(f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]

(g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

B.14 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either

(1) incorporated as originally stated,

(2) revised, or

(3) deleted

by this permit.

(b) All previous registrations and permits are superseded by this permit.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The

notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) This permit shall be reopened and revised under any of the circumstances listed in IAC 13-15-7-2 or if IDEM, OAQ, determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]

(c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.17 Permit Renewal [326 IAC 2-7-4]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

(b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]

(1) A timely renewal application is one that is:

(A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(2) If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this

existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

(c) Right to Operate After Application for Renewal [326 IAC 2-7-3]
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ, , takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, **,** any additional information identified as being needed to process the application.

(d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]
If IDEM, OAQ, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.18 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

(d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]

(a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

(b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.20 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;

(3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-7-20(b)(1), (c)(1), and (e)(2).

(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).

(d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

B.21 Source Modification Requirement [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by the requirement of 326 IAC 2 and 326 IAC 2-7-10.5.

B.22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2] [IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)] [326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.

(b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, I/M & Billing Section), to determine the appropriate permit fee.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [40 CFR 52 Subpart P] [326 IAC 6-3-2]

(a) Pursuant to 40 CFR 52 Subpart P, particulate matter emissions from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

(b) Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour. This condition is not federally enforceable.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at

least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Demolition and Renovation
The Permitte shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to

thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.8 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.9 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.10 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within thirty (30) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within thirty (30) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial thirty (30) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

C.11 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.12 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

(a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on July 18, 1996.

(b) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level.
[326 IAC 1-5-3]

C.13 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]

If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the source must comply with the applicable requirements of 40 CFR 68.

C.14 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. If a Permittee is required to have any Operation, Maintenance and Monitoring (OMM) Plan under 40 CFR 60/63, such plans shall be deemed to satisfy the requirements for a CRP for those compliance monitoring conditions. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:

(1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.

(2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan or Operation, Maintenance and Montioring (OMM) Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan to include such response steps taken.

The OMM Plan shall be submitted within the time frames specified by the appliable 40 CFR 60/63 requirement.

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:

(1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan; or

(2) If none of the reasonable response steps listed in the Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.

(3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.

(4) Failure to take reasonable response steps shall be considered a deviation from the permit.

(c) The Permittee is not required to take any further response steps for any of the following reasons:

(1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.

(3) An automatic measurement was taken when the process was not operating.

(4) The process has already returned or is returning to operating within “normal” parameters and no response steps are required.

(d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.

(e) The Permittee shall record all instances when, in accordance with Section D, response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

(f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.16 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]

(a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:

(1) Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);

(2) Indicate estimated actual emissions of other regulated pollutants (as defined by 326 IAC 2-7-1(32) ("Regulated pollutant which is used only for purposes of Section 19 of this rule") from the source, for purposes of Part 70 fee assessment.

(b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the

private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

C.17 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

(a) Records of all required monitoring data, reports and support information required by this Permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.18 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

(a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(e) Reporting periods are based on calendar years.

Stratospheric Ozone Protection

C.19 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

(a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

(b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

(c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

C.20 Application Requirements for Section 112(j) of the Clean Air Act [40 CFR 63.52(e) and 326 IAC 2-7-12]

(a) The Permittee shall submit a Part 2 Maximum Achievable Control Technology (MACT) Application in accordance with 40 CFR 63.52(e)(1). The Part 2 MACT Application shall meet the requirements of 40 CFR 63.53(b).

(b) Notwithstanding paragraph (a), the Permittee is not required to submit a Part 2 MACT Application if the Permittee no longer meets the applicability criteria of 40 CFR 63.50 by the application deadline in 40 CFR 63.52(e)(1). For example, the Permittee would not have to submit a Part 2 MACT Application if, by the application deadline:

(9) The source is no longer a major source of hazardous air pollutants, as defined in 40 CFR 63.2;

(10) The source no longer includes one or more units in an affected source category for which the U.S. EPA failed to promulgate an emission standard by May 15, 2002; or

(11) The MACT standard or standards for the affected source categories included at the source are promulgated.

(c) Notwithstanding paragraph (a), the Permittee shall comply with an applicable promulgated MACT standard, including the initial notification requirements of the MACT standard, in accordance with the schedule provided in the MACT standard, if the MACT standard is promulgated prior to the Part 2 MACT Application deadline. If a MACT has been promulgated and the source is subject to the MACT, the Permittee shall submit an application for a significant permit modification under 326 IAC 2-7-12 no later than nine (9) months prior to the compliance date for the MACT. The application should include information regarding which portions of the MACT are applicable to the emission units at the source and which compliance options will be followed. If a permit renewal application is due before the date that a significant permit modification application would be due, the Permittee shall include the required information in the renewal application in lieu of submitting an application for a significant permit modification.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Steel Joist and Deck Fabrication Plant

(a) One (1) joist fabrication line including a GMAW welding area and two (2) dip-and-drain paint tanks, identified as Super Long Span Line, constructed in August 1991, with a maximum production capacity of ten (10) tons of steel joists per hour.

(b) One (1) joist fabrication line including a GMAW welding area and two (2) dip-and drain paint tanks, identified as Long Span Line, constructed in September 1974, with the original solvent-based paint dip tanks replaced with water-based paint dip tanks in January 1993, with a maximum production capacity of ten (10) tons of steel joists per hour.

(c) One (1) joist fabrication line including a GMAW welding area and a vacuum-assisted flow coater, identified as Middle Span Line, constructed in March 1972, with the original solvent-based paint dip tanks replaced with a water-based flow coater in October 1996, with a maximum production capacity of ten (10) tons of steel joists per hour.

(d) One (1) joist fabrication line including a GMAW welding area and a vacuum-assisted flow coater, identified as Short Span Line, constructed in March 1972, with the original solvent-based paint dip tanks replaced with a water-based flow coater in September 1994, with a maximum production capacity of nine (9) tons of steel joists per hour.

(e) One (1) joist fabrication line including a GMAW welding area and two (2) dip-and drain paint tanks, identified as Combo Line, constructed in October 1985, with the original solvent-based paint dip tanks replaced with water-based paint dip tanks in September 1994, with a maximum production capacity of twelve (12) tons of steel joists per hour.

(f) One (1) bridging fabrication line including a GMAW welding area, two (2) dip-and drain paint tanks, and a vacuum coater, identified as Bridging Line, with the welding area and solvent-based paint tanks constructed in March 1972, with the original solvent-based paint tanks replaced with water-based paint tanks and a vacuum coater added in December 1992, with a maximum production capacity of ten (10) tons per hour.

(g) One (1) deck fabrication line including three (3) double-side roll coaters, three (3) electric infra-red drying ovens, and two (2) airless spray edge coaters, identified as Deck Line, with two (2) roll coaters constructed in October 1977 and a third roll coater and two (2) airless spray edge coaters constructed in February 1998, with a maximum production capacity of forty (40) tons of steel deck per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 PSD Minor Limit [326 IAC 2-2]

Pursuant to CP 033-8367-00027, issued on April 18, 1997, the VOC input to Super Long Span Line, Long Span Line, Middle Span Line, Short Span Line, Combo Line, Bridging Line, and Deck Line, shall not exceed 249 tons, combined, per twelve (12) consecutive month period with compliance determined at the end of each month. This usage limit is structured such that when including the VOC emissions from the insignificant activities, the source total VOC emissions remain less than 250 tons per year. Compliance with this limit renders the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

D.1.2 Particulate Emission Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate matter emissions from the welding lines shall not exceed the list rate when operating at the list process weight rate:

Welding Operation	Process Weight Rate (ton/hr)	Particulate Emission Limitation (lb/hr)
Super Long Span Line	0.047	0.53
Long Span Line	0.047	0.53
Middle Span Line	0.047	0.53
Short Span Line	0.043	0.50
Combo Line	0.06	0.62
Bridging Line	0.0148	0.24

These limitations were calculated using the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

D.1.3 Volatile Organic Compound (VOC) (Miscellaneous Metal Coating) [326 IAC 8-2-9]

(a) Pursuant to 326 IAC 8-1-9(d)(2) (Miscellaneous Metal Coating Operations), the VOC content of the primer coatings delivered to the applicators of the Super Long Span Line, Long Span Line, Middle Span Line, Short Span Line, and Combo Line shall be limited to 3.5 pounds of VOC per gallon of coating less water, for forced warm air dried coatings.

(b) Pursuant to 326 IAC 8-1-9(d)(2) (Miscellaneous Metal Coating Operations), the VOC content of the primer coatings delivered to the applicators of the Bridging Line shall be limited to 3.5 pounds of VOC per gallon of coating less water, for forced warm air dried coatings.

(c) Pursuant to 326 IAC 8-1-9(d)(1) (Miscellaneous Metal Coating Operations), the VOC content of the clear coatings delivered to the applicators of the Deck Line edge coaters shall be limited to 4.3 pounds of VOC per gallon of coating less water.

D.1.4 Volatile Organic Compound (VOC) [326 IAC 8-2-4]

Pursuant to IAC 8-2-4 (Coil Coating Operations), the volatile organic compound (VOC) content of coatings applied to any flat metal sheets or strips that are delivered in rolls or coils to the Deck Line's three (3) roll coaters shall be limited to 2.6 pounds VOC per gallon of coating less water delivered to the applicator.

D.1.5 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR 60, Subpart A] [326 IAC 12]

The provisions of 40 CFR 60 Subpart A - General Provisions, which are incorporated as 326 IAC 12-1, apply to the Deck Line's three (3) roll coaters, infra-red curing ovens, and water quench stations except when otherwise specified in 40 CFR 60 Subpart TT.

D.1.6 New Source Performance Standards [40 CFR 60.462, Subpart TT] [326 IAC 12]

Pursuant to 40 CFR Part 60.462 (Standard for VOC Emissions), the Deck Line's three (3) roll coaters, infra-red curing ovens, and water quench stations shall not cause any VOC discharged

into the atmosphere of more than 0.28 kilogram VOC per liter (2.3 pounds per gallon) of coating solids applied for each calendar month.

D.1.7 General Provisions Relating to NESHAP [326 IAC 20-1] [40 CFR 63, Subpart A]

The provisions of 40 CFR 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the Deck Lines coil coating lines except when otherwise specified in 40 CFR 63, Subpart SSSS.

D.1.8 Emission Limitations For Coil Coating Lines [40 CFR 63, Subpart SSSS][326 IAC 14]

On and after June 10, 2005, each of the Deck Line's coil coating lines shall use no more than 0.046 kg of organic HAP per liter of solids (0.38 pounds per gallon) applied during each twelve (12) consecutive month compliance period [40 CFR 63.5120(a)(2)]. The Permittee must be in compliance with this limitation at all times, including periods of start-up, shutdown, and malfunction [40 CFR 63.5140(a)]. The Permittee shall comply with this emission limit using the following compliance options:

(a) Using as-purchased compliant coatings: Coatings that individually meet the organic HAP emission limit of 0.046 kg of organic HAP per liter of solids as purchased and to which no additional HAP is added during distribution or application [40 CFR 63.5170(a)]; or

(b) Using as-applied compliant coatings: The average of each coating material applied during the twelve (12) consecutive month compliance period contain no more than 0.046 kg of organic HAP per liter of solids applied [40 CFR 63.5170(b)].

The Permittee may apply either of these compliance options to an individual coil coating line, or to multiple lines as a group. The Permittee may use different compliance options for different coil coating lines, or at different times on the same line.

D.1.9 Preventative Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities.

Compliance Determination Requirements

D.1.10 Volatile Organic Compounds (VOC) [326 IAC 8-1-2] [326 IAC 8-1-4]

Compliance with the VOC content and usage limitations contained in Conditions D.1.3 and D.1.4 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC data sheets. IDEM, OAQ reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.1.11 Monthly Volume-Weighted Average [40 CFR 60.462, Subpart TT][326 IAC 12]

The Permittee shall determine compliance with the VOC limit in Condition D.1.6, using the following procedure for determining monthly volume-weighted average emission of VOC's in kg/l of coating solids as applied using the following equations:

$$M_o + M_d = \sum_{i=1}^{n} L_{ci} D_{ci} W_{oi} + \sum_{j=1}^{m} L_{dj} D_{dj} \quad \text{(Equation 1)}$$

where:

M_o = Mass of VOC's in coatings consumed, as received in kilogram (kg)

M_d = Mass of VOC-solvent added to the coatings, in kg
L_c = The volume of each coating consumed, as received in liters
L_d = The volume of each VOC-solvent added to the coatings in liters (l)
W_o = The proportion of VOC's in each coating, as received (fraction by weight)
D_d = Density of each VOC-solvent added to the coatings (kg/l)
$\sum_{j=1}^{M} L_{dj}D_{dj}$ = Will be 0 if no VOC solvent is added to the coatings, as received
n = The number of different coatings used during calendar month, and
M = The number of different VOC solvents added to coatings used during the calendar month

$$L_s = \sum_{j=1}^{n} V_{si}L_{ci} \qquad \text{(Equation 2)}$$

Where:

L_s = Total volume of solids used in a calendar month

$$G = \frac{M_o + M_d}{L_s} \qquad \text{(Equation 3)}$$

Where:

G = Volume weighted average mass of VOC in coatings consumed in a calendar month per unit volume of coating solids applied, kg/l

D.1.12 Organic HAP Content [40 CFR 63, Subpart SSSS] [326 IAC 14]

(a) Pursuant to 40 CFR 63.5160(b), the Permittee shall determine the organic HAP weight fraction of each coating material applied in the coil coating lines. The organic HAP weight fraction shall be determined by the Permittee or coating manufacturer using one of the following methods:

(1) Method 311of Appendix A of 40 CFR 63 [40 CFR 63.5160(b)(1)].

(2) Method 24 of Appendix A of 40 CFR 63 to determine non aqueous volatile matter as a surrogate for HAP [40 CFR 63.5160(b)(2)].

(3) An alternative method approved by the Administrator [40 CFR 63.5160(b)(3)]

(4) Formulation data provided by the coating manufacturer [40 CFR 63.5160(b)(1)].

(b) Pursuant to 40 CFR 63.5160(c), the Permittee shall determine the solids content of each coating material applied using ASTM D2697-86 (Reapproved 1998) or ASTM D6093-97, or an EPA approved alternative method. The tests may be performed by the coating manufacturer and the results provided to the Permittee. Alternatively, the Permittee may use formulation data provided by the manufacturer of the coating to determine the volume of solids [40 CFR 63.5160(c)].

(c) Pursuant to 40 CFR 63.5170, the Permittee shall demonstrate compliance with Condition D.1.8 as follows:

(1) For compliance using as-purchased compliant coating [40 CFR 63.5170(a)]:

The Permittee shall demonstrate that each coating material applied during the twelve (12) consecutive month compliance period contains no more than 0.046 kg of organic HAP per liter of solids on an as purchased basis. The Permittee shall determine the organic HAP content for each coating applied using the methods outlined in Condition D.1.12(a) and the solids content using the methods outlined in Condition D.1.12(b). The Permittee shall use the following equation to calculate the organic HAP content of each coating:

$$H_{siap} = \frac{C_{hi}\, D_i}{V_{si}} \qquad \text{(Equation 3)}$$

where:

H_{siap} = as-purchased, organic HAP to solids ratio of coating material i (kg organic HAP/liter solids applied).
C_{hi} = organic HAP content of coating material i, expressed as a weight faction (kg/kg).
D_i = density of coating material i (kg/l).
V_{si} = volume fraction of solids in coating i (l/l).

(2) For compliance using as-applied compliant coatings [40 CFR 63.5170(b)(2)]:

The Permittee shall demonstrate that the average of all coating materials applied during the twelve (12) month compliance period contains no more than 0.046 kg of organic HAP per liter of solids applied. To demonstrate that the average organic HAP content on the basis of solids applied is less than 0.046 kg organic HAP per liter solids applied for the twelve (12) consecutive month compliance period, the Permittee shall use the following equation:

$$H_{S\,yr} = \frac{\sum_{y=1}^{12}\left[\sum_{i=1}^{p} V_i D_i C_{ahi} + \sum_{i=1}^{q} V_j D_j C_{hij}\right]}{\sum_{y=1}^{12}\left[\sum_{y=1}^{p} V_i V_{si}\right]} \qquad \text{(Equation 4)}$$

where:

$H_{s\,yr}$ = average for the 12-month compliance period, as-applied, organic HAP to solids ratio of all materials applied (kg organic HAP/liter solids applied).
V_i = volume of coating material i (l).
D_i = density of coating material i (kg/l)
C_{ahi} = monthly average, as-applied, organic HAP content of soilds-containing coating material i, expressed as a weight fraction (kg/kg).
V_j = volume of solvent j (l).
D_j = density of solvent j (kg/l).
C_{hij} = organic HAP content of solvent j added to coating material i, expressed as a weight fraction (kg/kg).
V_{si} = volume fraction of solids in coating i (l/l)
p = number of different coating materials applied in a month.

q = number of different solvents, thinners, reducers, diluents, or other non-solids-containing coating materials applied in a month.
y = month.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.13 Record Keeping Requirements

(a) To document compliance with Conditions D.1.1, D.1.3, and D.1.4 the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC and emission limits established in Condition D.1.1, D.1.3, and D.1.4. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

(1) The VOC content of each coating material and solvent used.

(2) The amount of coating material and solvent less water used on daily basis.

(A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.

(3) The volume weighted VOC content of the coatings used for each month;

(4) The cleanup solvent usage for each month;

(5) The total VOC usage for each month; and

(6) The weight of VOCs emitted for each compliance period.

(b) To document compliance with Condition D.1.6, the Permittee shall maintain records of all data and calculations used to determine monthly VOC emissions from each affected facility and to determine the monthly emission limit, where applicable.

(c) Pursuant to Condition D.1.8 and 40 CFR 63.5190(a), and on or before June 10, 2005, the Permittee shall maintain the following records in accordance with 40 CFR 63.10(b)(1):

(1) Records of which compliance option was used on each coating line and the time periods (beginning and ending dates and times) each option was used.

(2) Records of the organic HAP content (or volatile matter) data for the purpose of demonstrating compliance in accordance with Condition D.1.12(a) [40 CFR 63.5160(b)].

(3) Solids content data for the purpose of demonstrating compliance in accordance with Condition D.1.12(b) [40 CFR 63.5160(c)].

(4) Material, HAP, volatile matter and solids usage records.

(5) Compliance demonstrations calculated using the methods outlined in Conditions D.1.12(c)(1) and (2) [40 CFR.5170(a) and (b)(2)].

(d) To document compliance with Condition D.1.9, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.

(e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.14 Reporting Requirements [40 CFR 63, Subpart SSSS]

(a) Pursuant to 40 CFR 63.5180(b) and 63.9(b), the Permittee shall submit an initial notification no later than June 10, 2004. The initial notification shall contain:

(1) The name and address of the owner or operator;

(2) The address (i.e., physical location) of the emission units;

(3) An identification of the relevant standard, or other requirement, that is the basis of the notification and the date on which the source is required to be in compliance;

(4) A brief description of the nature, size, design and method of operation of the source, including its operating design capacity and an identification of each point of emission for each hazardous air pollutant; and

(5) A statement indicating that the source is a major source.

(b) Pursuant to 40 CFR 63.5180(d) and 63.9(h), the Permittee shall submit a Notification of Compliance Status Report no later than 30 calendar days following the end of the initial 12-month compliance period (June 30, 2006). The notification must be signed by the responsible official who must certify its accuracy.

(c) Pursuant to 40 CFR 63.5180(g), the Permittee shall submit semi-annual compliance reports. The first compliance report shall cover the period beginning June 10, 2005 and ending on December 31, 2005. The first compliance report shall be postmarked or delivered no later than January 31, 2006. Each subsequent compliance report shall cover the semiannual reporting period from January 1 through June 30 or the semi-annual reporting period July 1 through December 31. Each subsequent compliance report shall be postmarked or delivered no later than July 31 for the reporting period ending June 30 or January 31 for the reporting period ending December 31. The semi-annual compliance report shall contain the following information:

(1) The company name and address.

(2) A statement by the responsible official with official's name, title, and signature, certifying the accuracy of the content of the report.

(3) The date of report and beginning and ending dates of the reporting period.

(4) Identification of the compliance option or options used on each coil coating line during the reporting period. If the compliance method for a coil coating line is switched during the reporting period, the Permittee shall provide the beginning dates for each compliance method used.

(5) A statement that there were no deviations from the standards during the reporting period.

(d) Pursuant to 40 CFR 63.5180(h), the Permittee shall also submit the following information for each deviation occurring during a semi-annual reporting period:

(1) The total operating time of each affected source during the reporting period.

(2) Information on the number, duration, and cause (including unknown cause, if applicable) as applicable, and the corrective action taken.

This information shall be submitted as part of the semi-annual compliance report.

(e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.15 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Specifically Regulated Insignificant Activities - Degreasers

(a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.[326 IAC 8-3-2][326 IAC 8-3-5]

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations) for cold cleaning operations constructed after January 1, 1980, the Permittee shall:

(a) Equip the cleaner with a cover;

(b) Equip the cleaner with a facility for draining cleaned parts;

(c) Close the degreaser cover whenever parts are not being handled in the cleaner;

(d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;

(e) Provide a permanent, conspicuous label summarizing the operation requirements;

(f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.2.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for cold cleaner degreaser operations without remote solvent reservoirs constructed after July 1, 1990, the Permittee shall ensure that the following control equipment requirements are met:

(1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:

(A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38^{O}C) (one hundred degrees Fahrenheit (100^{O}F));

(B) The solvent is agitated; or

(C) The solvent is heated.

(2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38^{O}C) (one hundred degrees Fahrenheit (100^{O}F)), then the drainage facility must be internal such that articles are enclosed under the

cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

(3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).

(4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

(5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38^{O}C) (one hundred degrees Fahrenheit (100^{O}F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9^{O}C) (one hundred twenty degrees Fahrenheit (120^{O}F)):

(A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.

(B) A water cover when solvent is used is insoluble in, and heavier than, water.

(C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

(b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), for cold cleaner degreaser operations without remote solvent reservoirs constructed after July 1, 1990, the Permittee shall ensure that the following operating requirements are met:

(1) Close the cover whenever articles are not being handled in the degreaser.

(2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.

(3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Specifically Regulated Insignificant Activities - Welding Operations

(b) The following equipment related to manufacturing activities not resulting in the emissions of HAPs: welding equipment. [326 IAC 6-3-2]

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Particulate Emissions Limitations [326 IAC 6-3-2][40 CFR 52 Subpart P]

(1) Pursuant to 40 CFR 52 Subpart P, the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

(2) Pursuant to 326 IAC 6-3-2(e)(2), the allowable particulate emissions rate from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour. This condition is not federally enforceable.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: NUCOR Vulcraft Group - St. Joe Division
Source Address: 6610 County Road 60, Saint Joe, Indiana 46785
Mailing Address: P.O. Box 1000, Saint Joe, Indiana 46785
Part 70 Permit No.: T033-15749-00027

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

9 Annual Compliance Certification Letter

9 Test Result (specify) _____

9 Report (specify) _____

9 Notification (specify) _____

9 Affidavit (specify) _____

9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Phone:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

COMPLIANCE BRANCH
100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: NUCOR Vulcraft Group - St. Joe Division
Source Address: 6610 County Road 60, Saint Joe, Indiana 46785
Mailing Address: P.O. Box 1000, Saint Joe, Indiana 46785
Part 70 Permit No.: T033-15749-00027

This form consists of 2 pages **Page 1 of 2**

9 This is an emergency as defined in 326 IAC 2-7-1(12)

- The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) working days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16.

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:

Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance Data Section

Part 70 Quarterly Report

Source Name: NUCOR Vulcraft Group - St. Joe Division
Source Address: 6610 County Road 60, Saint Joe, Indiana 46785
Mailing Address: P.O. Box 1000, Saint Joe, Indiana 46785
Part 70 Permit No.: T033-15749-00027
Facility: Steel Joist and Deck Fabrication Plant (Super Long Span Line, Long Span Line, Middle Span Line, Short Span Line, Combo Line, Bridging Line, and Deck Line)
Parameter: VOC Usage
Limit: The VOC input to the Super Long Span Line, Long Span Line, Middle Span Line, Short Span Line, Combo Line, Bridging Line, and Deck Line, combined, shall not exceed 249 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance Data Section

PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: NUCOR Vulcraft Group - St. Joe Division
Source Address: 6610 County Road 60, Saint Joe, Indiana 46785
Mailing Address: P.O. Box 1000, Saint Joe, Indiana 46785
Part 70 Permit No.: T033-15749-00027

Months: _____ **to** _____ **Year:** _____

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Page 2 of 2

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

July 18, 2003

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a
Part 70 Operating Permit Renewal

Source Background and Description

Source Name:	NUCOR Vulcraft Group - St. Joe Division
Source Location:	6610 County Road 60, St. Joe, Indiana 46785
County:	DeKalb
SIC Code:	3441 and 3444
Operation Permit No.:	T033-15749-00027
Permit Reviewer:	ERG/KC

The Office of Air Quality (OAQ) has reviewed a Part 70 permit renewal application from NUCOR Vulcraft Group - St. Joe Division relating to the operation of a stationary steel joist and deck fabrication plant for the building construction industry.

Permitted Emission Units and Pollution Control Equipment

This source consists of the following emission units and pollution control devices:

(a) One (1) joist fabrication line including a GMAW welding area and two (2) dip-and-drain paint tanks, identified as Super Long Span Line, constructed in August 1991, with a maximum production capacity of ten (10) tons of steel joists per hour.

(b) One (1) joist fabrication line including a GMAW welding area and two (2) dip-and drain paint tanks, identified as Long Span Line, constructed in September 1974, with the original solvent-based paint dip tanks replaced with water-based paint dip tanks in January 1993, with a maximum production capacity of ten (10) tons of steel joists per hour.

(c) One (1) joist fabrication line including a GMAW welding area and a vacuum-assisted flow coater, identified as Middle Span Line, constructed in March 1972, with the original solvent-based paint dip tanks replaced with a water-based flow coater in October 1996, with a maximum production capacity of ten (10) tons of steel joists per hour.

(d) One (1) joist fabrication line including a GMAW welding area and a vacuum-assisted flow coater, identified as Short Span Line, constructed in March 1972, with the original solvent-based paint dip tanks replaced with a water-based flow coater in September 1994, with a maximum production capacity of nine (9) tons of steel joists per hour.

(e) One (1) joist fabrication line including a GMAW welding area and two (2) dip-and drain paint tanks, identified as Combo Line, constructed in October 1985, with the original solvent-

based paint dip tanks replaced with water-based paint dip tanks in September 1994, with a maximum production capacity of twelve (12) tons of steel joists per hour.

(f) One (1) bridging fabrication line including a GMAW welding area, two (2) dip-and drain paint tanks, and a vacuum coater, identified as Bridging Line, with the welding area and solvent-based paint tanks constructed in March 1972, with the original solvent-based paint tanks replaced with water-based paint tanks and a vacuum coater added in December 1992, with a maximum production capacity of ten (10) tons per hour.

(g) One (1) deck fabrication line including three (3) double-side roll coaters, three (3) electric infra-red drying ovens, and two (2) airless spray edge coaters, identified as Deck Line, with two (2) roll coaters constructed in October 1977 and a third roll coater and two (2) airless spray edge coaters constructed in February 1998, with a maximum production capacity of forty (40) tons of steel deck per hour.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) Degreasing operations that do not exceed 145 gallons per 12 months, and are not subject to 326 IAC 20-6. [326 IAC 8-3-2][326 IAC 8-3-5]

(b) The following equipment related to manufacturing activities not resulting in the emissions of HAPs: welding equipment.[326 IAC 6-3-2]

(c) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]

(d) Natural gas-fired space heaters with heat input equal to or less than ten million (10,000,000) Btu per hour.

(e) Propane or LPG, or butane-fired space heaters with heat input equal to or less than six million (6,000,000) Btu per hour.

(f) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 Btu/hour, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 Btu/hr.

(g) Combustion source flame safety purging on startup.

(h) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles having a storage capacity less than or equal to 10,500 gallons.

(i) The following VOC and HAP storage containers: Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons.

(j) Vessels storing lubricating oils, hydraulic oils, and machining fluids.

(k) Packaging lubricants or greases.

(l) Filling drums, pails or other packaging containers with lubricating oils, waxes, and greases.

(m) Application of oils, greases, lubricants, or nonvolatile materials applied as temporary protective coatings.

(n) Machining where an aqueous cutting coolant continuously floods the machining interface.

(o) Cleaners and solvents characterized as follows:

(1) having vapor pressure equal to or less than 2kPa; 15mm Hg; or 0.3 psi measured at 38 degrees C (100 o F); or

(2) having a vapor pressure equal to or less than 0.7 kPa; 5mmHg; or 0.1 psi measured at 20 o C (68 o F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.

(p) Infrared cure equipment.

(q) Cutting 200,000 linear feet or less of one (1) inch plate for structural steel and bridge fabrication activities.

(r) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.

(s) Any operation using aqueous solutions containing less than 1% by weight of VOCs, excluding HAPs.

(t) Process vessel degassing and cleaning to prepare for internal repairs.

(u) Purging gas lines and vessels that is related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.

(v) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.

(w) On-site fire and emergency response training approved by the department.

(x) Natural gas turbines or reciprocating engines not exceeding 16,000 horsepower,

(y) Stationary fire pumps, and

(z) Activities with emissions equal to or less than the following thresholds: 5 tons per year PM or PM10, 10 tons per year SO2, NOx, or VOC, 0.2 tons per year Pb, 1.0 tons per year of a single HAP, or 2.5 tons per year of any combination of HAPs:

(1) Two (2) storage tanks, each capable of holding 6,000 gallons of water-based paint, associated with the Deck Line.

(2) Two (2) underground storage tanks, each capable of holding 12,000 gallons of diesel fuel, associated with the Truck Maintenance building.

Existing Approvals

The source has constructed or has been operating under the following previous approvals:

(a) T033-6286-00027, issued on December 23, 1997.

(b) CP 033-8994-00027, issued on February 13, 1998.

(c) MPM 033-12721-00027, issued on December 12, 2000.

All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.

The following terms and conditions from previous approvals have been determined no longer applicable; therefore, were not included into this Part 70 permit:

(a) All construction conditions from all previously issued permits.

Reason not incorporated: All facilities previously permitted have already been constructed; therefore, the construction conditions are no longer necessary as part of the operating permit. Any facilities that were previously permitted but have not yet been construction would need pre-construction approval before beginning construction.

(b) Condition D.1.5 and D.1.6 of CP033-8994-00027, issued on February 13, 1998: Daily Volume Weighted Average [326 IAC 8-2-4]

Reason not incorporated: The source switched to waterborne coatings. Pursuant to 326 IAC 8-1-2(a)(4), the emission limitations can be achieved using waterborne coatings only. Therefore, the daily volume weighted averaging of all coatings can be removed.

(c) Condition D.1.3 of T033-6286-00027, issued December 23, 1997: PSD PM Minor Limit - Any change or modification which may increase the total potential PM emissions from the welding operation to 250 tons per year must be approved by the OAQ and be subject to the requirements of 326 IAC 2-2, PSD, and 40 CFR 52.21. This operation condition also satisfies the requirements of 326 IAC 6-3-2.

Reason not incorporated: This source currently has and always has had the potential to emit particulate matter less than two hundred fifty (250) tons per year. Additionally, the source has taken a limit on the VOC input in order to ensure PSD Minor status. There is no need for this condition.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the Part 70 renewal permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete Part 70 permit renewal application for the purposes of this review was received on March 22, 2002. Additional information was received on May 29, 2002.

There was no notice of completeness letter mailed to the source.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (pages 1 through 4).

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source, excluding the emission limits that were contained in the previous Part 70 permit.

Pollutant	Potential To Emit (tons/year)
PM	11.7
PM-10	11.7
SO_2	--
VOC	770.8
CO	--
NO_x	--

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
Glycol Ether	512.7
Manganese	7.1
Nickel	0.0022
Chromium	0.0022
TOTAL	519.8

(a) The unrestricted emissions of volatile organic compounds is equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(b) The unrestricted emissions of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(c) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD and Emission Offset applicability.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2000 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	4.01
PM-10	4.01
SO_2	--
VOC	185.97
CO	--
NO_x	--

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

	Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO_2	VOC	CO	NO_X	Total HAPs
Steel Joist and Deck Fabrication Plant	11.7	11.7	0	Less than 249 (326 IAC 2-2)	0	0	Less than 250
Insignificant Activities	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Total Emissions	11.7	11.7	Neg.	Less than 250	Neg.	Neg.	Less than 250

County Attainment Status

The source is located in DeKalb County.

Pollutant	Status
PM-10	Attainment
SO_2	Attainment
NO_2	Attainment
Ozone	Attainment
CO	Attainment
Lead	Attainment

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. DeKalb County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) DeKalb County has been classified as attainment or unclassifiable for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(c) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD and Emission Offset applicability.

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

(a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.

(b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Federal Rule Applicability

(a) The Deck Line's three (3) roll coaters, infra-red curing ovens, and water quench stations are subject to the requirements of 40 CFR 60, Subpart TT (Standards of Performance for Metal Coil Surface Coating) because they are coating metal coils and the process line was modified after January 5, 1980, the applicability date of the rule.

(1) 40 CFR 60.462(a) (Standards for Volatile Organic Compounds (VOC))
The owner or operator of the Deck Line's three (3) roll coaters, infra-red curing ovens, and water quench stations shall not cause VOC discharge into the atmosphere of more than 0.28 kilogram VOC per liter (2.3 pounds per gallon) of coating solids applied for each calendar month.

(2) 40 CFR 60.463(c) (Compliance Provisions)
The owner shall use the following procedure for determining monthly volume-weighted average emission of VOCs in kg/l of coating solids as applied:

$$M_o + M_d = \sum_{i=1}^{n} L_{ci} D_{ci} W_{oi} + \sum_{j=1}^{m} L_{dj} D_{dj}$$

where:

M_o = Mass of VOC's in coatings consumed, as received in kilogram (kg)
M_d = Mass of VOC-solvent added to the coatings, in kg
L_c = The volume of each coating consumed, as received in liters
L_d = The volume of each VOC-solvent added to the coatings in liters (l)
W_o = The proportion of VOC's in each coating, as received (fraction by weight)
D_d = Density of each VOC-solvent added to the coatings (kg/l)
$\sum L_{dj} D_{dj}$ = Will be 0 if no VOC solvent is added to the coatings, as received
n = The number of different coatings used during calendar month, and
M = The number of different VOC solvents added to coatings used during the calendar month.

(3) 40 CFR 60.463(a)(1) - (Compliance Provisions)
The owner or operator shall determine the composition of the coatings by formulation data supplied by the manufacturer of the coatings or by an analysis of each coating, as received using reference Method 24. The Administrator may require the owner or operator who uses formulations data supplied by the manufacturer of the coatings to determine the VOC content of coating using Reference Method 24, or an equivalent or an alternative method.

(4) 40 CFR 60.464 - (Monitoring of Emissions and Operations)
Compliance with the limit of 0.28 kg of VOC per liter of coating solids, the owner or operator of the Deck Line's three (3) roll coaters, infra-red curing ovens, and water

quench stations shall compute and record the average VOC content of coatings applied during each calendar month, using the following equation:

$$M_o + M_d = \sum_{i=1}^{n} L_{ci} D_{ci} W_{oi} + \sum_{j=1}^{m} L_{dj} D_{dj} \quad \text{(Equation 1)}$$

Deck Line's three (3) roll coaters, infra-red curing ovens, and water quench stations are in compliance with this NSPS, since the volume weighted average mass of VOC in coatings per unit volume of coating solids does not exceed the allowable of 0.28 kg/l solids (2.3 pounds VOC per gallon solids).

(b) The Deck Line's two (2) edge coaters are not subject to the requirements of 40 CFR 60, Subpart TT (Standards of Performance for Metal Coil Surface Coating) because they apply coatings to fabricated steel deck and do not meet the definition of "the following affected facilities in a metal coil surface coating operation: each prime coat operation, each finish coat operation, and each prime and finish coat operation combined when the finish coat is applied wet on wet over the prime coat and both coatings are cured simultaneously."

(c) 40 CFR Part 63, Subpart MMMM, Miscellaneous Metal Products (Surface Coating) is not a proposed rule at this time but may be applicable to the source in the future.

(d) The deck lines coil coating lines (which includes the three surface coating booths and the electric infra-red drying ovens) are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAPs) 40 CFR 63, Subpart SSSS (National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Coil) because they are used to apply surface coatings to metal coil that is more than 0.15 millimeters (0.006 inches) thick and are located at a plant that is a major source of hazardous air pollutants (HAPs) (i.e., has potential emissions of greater than 10 tons per year of a single HAP and greater than 25 tons per year for any combination of HAPs). This NESHAP was promulgated on June 10, 2002 and applies to new and existing coil coating operations. The standards included in this NESHAP apply to the coating application stations and associated curing ovens. Wet section/pretreatment, quench operations, and other ancillary operations, such as mixing, thinning, cleaning, wastewater treatment, and coating storage areas, are not subject to any emissions standards or operational limits. This NESHAP limits organic HAP emissions to no more than 0.046 kg of organic HAP per liter of solids applied (0.38 pounds of organic HAP per gallon of solids applied) during each twelve month compliance period.

The source may comply with the emission limits either by (1) using coatings that meet the emission rate (either individually or collectively); (2) using a capture system and control device that meet the 98% reduction limit or emission rate; or (3) using a 100% efficient capture system and an oxidizer that emits no more than 20 ppmv. The source may use any of these compliance options for individual coil coating lines or multiple lines as a group, and may use different compliance options on different coil coating lines or groups of coil coating lines. In addition, the source has the flexibility to switch between different compliance options on any coating line or group of coating lines provided they document and report the change in a semi-annual compliance report. The source is required to be in compliance with this NESHAP by June 10, 2005, and must submit the initial notification by June 10, 2004 [40 CFR 63.5180(b) and 63.9(b)] and a Notification of Compliance Status Report no later than 30 calendar days following the end of the initial six month compliance period.

In a letter from the source dated July 22, 2002, NUCOR stated that they plan to comply with this new NESHAP by using coatings that meet the emission rate. For the coil coating lines, NUCOR will use one of the following two options to comply with the emission limit:

(1) Use as-purchased compliant coating that individually meet the organic HAP emission limit of 0.046 kg/l of solids [see 40 CFR 63.5170(a)], or

(2) Use as applied compliant coatings such that the average of all coating material applied during the twelve month compliance period meets the emission limit of 0.046 kg/l of solids [see 40 CFR 63.5170(b)(2)].

To determine compliance with the emission limitation, the source is required to determine the organic HAP and solids content of each coating used in their coil coating operations. The organic HAP content of the coatings may be determined using EPA Method 311 (see Appendix A of 40 CFR 63) or using formulation data provided by the manufacturer. The source may also use the volatile content of the coating as a surrogate for the organic HAP content. The volatile content of the coating may be determined using EPA Method 24 (see Appendix A of 40 CFR 63). The solids content is determined using either ASTM D2697-86 (Reapproved 1988) or ASTM D6093-97. These tests may be performed by the source or coating manufacturer. The organic HAP and solids content of the coatings are used in the equations in 40 CFR 63.5170(a) and 40 CFR 63.5170(b)(2) to determine compliance with the emission limit.

In addition to the emission limit and compliance determination conditions, the proposed permit includes the record keeping and reporting requirements necessary for compliance with 40 CFR 63, Subpart SSSS. Beginning June 10, 2005, the source must keep records of the amount of coating materials applied, the organic HAP content of each coating, the solids content of each coating, and the calculations required under 40 CFR 63.5170(a) and (b)(2).

(e) The insignificant degreasers are not subject to the requirements of 40 CFR 63, Subpart T (National Emissions Standards for Halogenated Solvent Cleaning) because they do not use a solvent containing greater than five percent (5%) by weight of any halogenated solvent listed in 40 CFR 63.460(a).

(f) The source has requested that IDEM, OAQ determine if 112(j) is applicable to their facility. IDEM is currently working on these determinations.

(g) This source is not subject to the provisions of 40 CFR 64, Compliance Assurance Monitoring. In order for this rule to apply, a specific emissions unit must meet three criteria for a given pollutant:

(1) The unit is subject to an emission limitation or standard for the applicable regulated air pollutant;

(2) The unit uses a control device to achieve compliance with any such emission limitation or standard; and

(3) The unit has potential pre-control device emissions of the applicable regulated air pollutant that are equal or greater than 100 percent of the amount required for a source to be classified as a major source.

For this source, no units require the use of a control device to achieve compliance with the representative emission limitations. Therefore, 40 CFR 64 is not applicable.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

This source is not one of the 28 listed source categories. The following units were constructed prior to the PSD rules: Long Span Line, Middle Span Line, Short Span Line, Bridging Line, and Deck Line. This source was an existing major source under PSD when the PSD rules came into effect. In 1985, the Combo Line was constructed. This modification had the potential to emit 195 tons per year of VOC and should have triggered PSD. In 1991, the Super Long Span Line was constructed. This modification had the potential to emit 89 tons per year of VOC and should have triggered PSD. An enforcement action was taken by IDEM, OAQ, against the source for these violations. As a result of the enforcement action, the source switched from solvent-based coatings to water-based coating. The source also accepted a VOC usage limit of 249 tons per year to ensure PSD minor status.

In 1997, the source modified the Middle Span Line. The potential to emit of VOC from this line was 164 tons per year. This facility was proposed as part of CP 033-8367-00027, issued April 18, 1997 and was included when the source accepted a source-wide limit of 249 tons per year of VOC. Therefore, this source was a minor PSD source and the modification was not subject to PSD because emissions were limited to less than 250 tons per year.

In 1998, the source constructed two (2) edge coaters and an additional flow coater on the Deck Line. The potential to emit from these process lines was 238.9 tons of VOC per year. Therefore, 326 IAC 2-2 and 40 CFR 52.21 did not apply to this modification. Also, as part of the Deck Line, these facilities were included in the PSD minor limit. Therefore, this source is still a PSD minor source.

The PSD minor limit is as follows:

The VOC input to Super Long Span Line, Long Span Line, Middle Span Line, Short Span Line, Combo Line, Bridging Line, and Deck Line, combined, shall not exceed two hundred forty-nine (249) tons per twelve (12) consecutive month period with compliance determined at the end of each month. This usage limit is structured such that when including VOC emissions from the insignificant operations, source total VOC emissions remain less than two hundred fifty (250) tons per year. Compliance with this limit renders the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants)

(a) The requirements of 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants) are not applicable to the Super Long Span Line, Long Span Line, Middle Span Line, Short Span Line, Combo Line, and Bridging Line because these operations were constructed prior to July 27, 1997.

(b) The requirements of 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants) are not applicable to Deck Line even though a roll coater and two (2) edge coaters were constructed after July 27, 1997 and have the potential to emit greater than ten (10) tons per year of a single HAP and greater than twenty-five (25) tons per year of any combination of HAPs because these facilities do not produce a final or intermediate product by themselves, they do not operate independently from the existing equipment, and they do not constitute a reconstruction because the fixed capital cost of the new equipment is less than 50% of the fixed capital costs that would be required to construct a comparable process.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting) because it has the potential to emit more than one hundred (100) tons per year of volatile organic compounds. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as

specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8) (Emission Statement Operating Year).

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Coating and Welding Lines (Super Long Span Line, Long Span Line, Middle Span Line, Short Span Line, Combo Line, Bridging Line, and Deck Line)

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

On June 12, 2002, revisions to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) became effective; this rule was previously referred to as 326 IAC 6-3 (Process Operations). As of the date this permit is being issued, these revisions have not been approved by EPA into the Indiana State Implementation Plan (SIP); therefore, the requirements from the previous version of 326 IAC 6-3 (Process Operations), which have been approved into the SIP, will remain applicable requirements until the revisions to 326 IAC 6-3 are approved into the SIP and the condition is modified in a subsequent permit action.

(a) Coating Operations

The requirements of 326 IAC 6-3 (Process Operations), the version that has been approved into the SIP, are not applicable to the Super Long Span Line, Long Span Line, Middle Span Line, Short Span Line, Combo Line, Bridging Line, or Deck Line because these units do not have the potential to emit particulate matter.

The requirements of 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes), the version that has not yet been approved into the SIP, do not apply to the Super Long Span Line, Long Span Line, Combo Line, or Bridging Line because 326 IAC 6-3-2(b)(5) provides an exemption for dip coating. The requirements of 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) do not apply to the Middle Span Line or Short Span Line because 326 IAC 6-3-2(b)(7) provides an exemption for flow coating. The requirements of 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) do not apply to Deck Line roll coaters because 326 IAC 6-3-2(b)(6) provides an exemption for roll coating. The requirements of 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) do not apply to the Deck Line edge coaters because the Deck Line edge coaters do not have the potential to emit particulate.

(b) Welding Operations

Pursuant to the requirements of 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes), the particulate matter emissions from the welding lines shall not exceed the list rate when operating at the list process weight rate:

Welding Operation	Process Weight Rate (ton/hr)	Particulate Emission Limitation (lb/hr)
Super Long Span Line	0.047	0.53
Long Span Line	0.047	0.53
Middle Span Line	0.047	0.53
Short Span Line	0.043	0.50
Combo Line	0.06	0.62
Bridging Line	0.0148	0.24

These limitations were calculated using the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour, and P = process weight rate in tons per hour

Under the revisions of 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes), the version that has not yet been approved into the SIP, welding operations are exempt pursuant to 326 IAC 6-3-2(b)(9).

326 IAC 8-1-6 (New Facilities; General Reduction Requirements)

(a) The requirements of 326 IAC 8-1-6 (New Facilities; General Reduction Requirements) do not apply to Super Long Span Line, Long Span Line, Middle Span Line, Short Span Line, Combo Line, and Bridging Line even though these operations were constructed or modified after January 1, 1980 and have the potential to emit greater than twenty-five (25) tons of VOC per year because these operations are subject to the requirements of 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations).

(b) The requirements of 326 IAC 8-1-6 (New Facilities; General Reduction Requirements) do not apply to the Deck Line edge coaters even though they were constructed after January 1, 1980 because this operations do not have the potential to emit greater than twenty-five (25) tons per year of VOC and they are subject to the requirements of 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations).

(c) The requirements of 326 IAC 8-1-6 (New Facilities; General Reduction Requirements) do not apply to the Deck Line's three (3) roll coating operations even though they were modified after January 1, 1980 and have the potential to emit greater than twenty-five (25) tons of VOC per year because these operations are subject to the requirements of 326 IAC 8-2-4 (Coil Coating Operations).

326 IAC 8-2-4 (Coil Coating Operations)

(a) The primer coating operations at the Deck Line's three (3) roll coating operations are subject to 326 IAC 8-2-4 (Coil Coating Operations) because one (1) roll coater was constructed after July 1, 1990 and has actual emissions greater than fifteen (15) pounds of VOC per day and two (2) of the roll coaters were existing as of January 1, 1980 at a source with the potential to emit greater than one hundred (100) tons of VOC per year. Additionally, the three (3) roll coating operations are coil coating operations. Pursuant to 326 IAC 8-2-4, the VOC content of the coatings applied to any flat metal sheets or strips that are delivered in rolls or coils to the Deck Line's three (3) roll coaters shall be limited to 2.6 pounds of VOC per gallon of coating less water delivered to the applicator.

(b) The requirements of 326 IAC 8-2-4 (Coil Coating Operations) do not apply to the Deck Line's two (2) edge coaters because the edge coaters apply coatings to fabricated steel deck, not to flat metal sheets or strips that come in rolls or coils, as required by the rule.

(c) The requirements of 326 IAC 8-2-4 (Coil Coating Operations) do not apply to the Super Long Span Line, Long Span Line, Middle Span Line, Short Span Line, Combo Line, or Bridging Line because these operations are not coil coating operations.

326 IAC 8-2-9 (Miscellaneous Metal Coating Operations)

(a) The requirements of 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations) are applicable to the Super Span Line because it was constructed after November 1, 1980 and it has the potential to emit greater than twenty-five (25) tons of VOC per year. The requirements of 326 IAC 8-2-9 are also applicable to the Long Span Line, Middle Span

Line, Short Span Line, and Combo Line because these facilities were all modified after November 1, 1980 and have the potential to emit greater than twenty-five (25) tons of VOC per year. Pursuant to 326 IAC 8-1-9(d)(2), the VOC content of the primer coatings delivered to the applicators of the Super Long Span Line, Long Span Line, Middle Span Line, Short Span Line, and Combo Line shall be limited to 3.5 pounds of VOC per gallon of coating less water, for forced warm air dried coatings.

Based on the MSDS submitted by the Permittee and the calculations, the coating operations are in compliance with this requirement.

The requirements of 326 IAC 8-2-9(f) do not apply to these units because all coating operations at this facility involve water-based coatings. Therefore application equipment is cleaned with water, not solvents. Additionally, joist fabrication lines are not equipped with spray guns.

(b) The requirements of 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations) are applicable to the Bridging Line because it was modified after November 1, 1980 and it has the potential to emit greater than twenty-five (25) tons of VOC per year. Pursuant to 326 IAC 8-1-9(d)(2), the VOC content of the primer coatings delivered to the applicators of the Bridging Line shall be limited to 3.5 pounds of VOC per gallon of coating less water, for forced warm air dried coatings.

Based on the MSDS submitted by the Permittee and the calculations, the coating operations are in compliance with this requirement.

The requirements of 326 IAC 8-2-9(f) do not apply to this operation because all coating operations at this facility involve water-based coatings. Therefore application equipment is cleaned with water, not solvents. Additionally, bridging fabrication lines are not equipped with spray guns.

(c) The requirements of 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations) are applicable to edge coaters of the Deck Line because they were constructed after July 1, 1990 and they have actual emissions greater than fifteen (15) pound of VOC per day. Pursuant to 326 IAC 8-1-9(d)(1), the VOC content of the clear coatings delivered to the applicators of the Deck Line edge coaters shall be limited to 4.3 pounds of VOC per gallon of coating less water.

Based on the MSDS submitted by the Permittee and the calculations, the coating operations are in compliance with this requirement.

The requirements of 326 IAC 8-2-9(f) do not apply to this operation because all coating operations at this facility involve water-based coatings. Therefore application equipment is cleaned with water, not solvents.

(d) The requirements of 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations) are not applicable to the roll coaters of the Deck Line because the roll coaters are subject to the requirements of 326 IAC 8-2-4 (Coil Coating Operations).

326 IAC 8-6 (Organic Solvent Emission Limitations)

The requirements of 326 IAC 8-6 (Organic Solvent Emission Limitations) do not apply to this source. Only two roll coaters of the Deck Line were constructed between October 7, 1974 and January 1, 1980, the applicability dates of this rule. However, these roll coaters do not have the potential to emit one hundred (100) tons per year of VOC.

State Rule Applicability - Insignificant Degreasers

326 IAC 8-3-2 (Cold Cleaner Operations)

The insignificant degreasers are subject to 326 IAC 8-3-2 (Cold Cleaner Operations) because they are cold cleaning operations constructed after January 1, 1980. Pursuant to 326 IAC 8-3-2, for cold cleaning operations constructed after January 1, 1980, the Permittee shall:

(a) Equip the cleaner with a cover;

(b) Equip the cleaner with a facility for draining cleaned parts;

(c) Close the degreaser cover whenever parts are not being handled in the cleaner;

(d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;

(e) Provide a permanent, conspicuous label summarizing the operation requirements;

(f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control)

The insignificant degreasers are subject to 326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control) because they are cold cleaners that were constructed after July 1, 1990.

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for cold cleaner degreaser operations without remote solvent reservoirs constructed after July 1, 1990, the Permittee shall ensure that the following control equipment requirements are met:

(1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:

(A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius ($38^{O}C$) (one hundred degrees Fahrenheit ($100^{O}F$));

(B) The solvent is agitated; or

(C) The solvent is heated.

(2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius ($38^{O}C$) (one hundred degrees Fahrenheit ($100^{O}F$)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

(3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).

(4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

(5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38^{O}C) (one hundred degrees Fahrenheit (100^{O}F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9^{O}C) (one hundred twenty degrees Fahrenheit (120^{O}F)):

(A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.

(B) A water cover when solvent is used is insoluble in, and heavier than, water.

(C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

(b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), for cold cleaner degreaser operations without remote solvent reservoirs constructed after July 1, 1990, the Permittee shall ensure that the following operation requirements are met:

(1) Close the cover whenever articles are not being handled in the degreaser.

(2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.

(3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

State Rule Applicability - Insignificant Welding Operations

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

On June 12, 2002, revisions to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) became effective; this rule was previously referred to as 326 IAC 6-3 (Process Operations). As of the date this permit is being issued, these revisions have not been approved by EPA into the Indiana State Implementation Plan (SIP); therefore, the requirements from the previous version of 326 IAC 6-3 (Process Operations), which have been approved into the SIP, will remain applicable requirements until the revisions to 326 IAC 6-3 are approved into the SIP and the condition is modified in a subsequent permit action.

Pursuant to 326 IAC 6-3 (Process Operations), which has been approved into the SIP, the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

Pursuant to 326 IAC 6-3-2(e)(2) (Particulate Emission Limitations for Manufacturing Processes), the version that has not yet been approved into the SIP, the allowable particulate emissions rate from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

State Rule Applicability - Paved and Unpaved Roads and Parking Areas

326 IAC 6-4 (Fugitive Dust Emissions)

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)

The Permittee is not subject to the requirements of 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations) because the source does not have the potential to emit greater than twenty-five (25) tons per year of fugitive particulate matter.

Testing Requirements

There are no testing requirements for the following coating lines because there is a clear method of demonstrating compliance via recordkeeping and MSDS sheets: Super Long Span Line, Long

Span Line, Middle Span Line, Short Span Line, Combo Line, Bridging Line, and Deck Line.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

Conclusion

The operation of this steel joist and deck fabrication plant shall be subject to the conditions of the attached Part 70 Permit No. T033-15749-00027.

Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations

Company Name: Nucor Vulcraft Group
Address City IN Zip: 6610 County Road 60, Saint Joe, IN 46785
CP: 033-15749-00027
Plt ID: 033-00027
Reviewer: ERG/AO
Date: 4/15/03

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Super Long Span Line (SP-9508-3)	9.9	63.75%	52.2%	11.6%	62.3%	21.88%	1.77000	10.000	3.05	1.15	20.34	488.12	89.08	0.00	5.25	100%
Long Span Line (SP-9508-3)	9.9	63.75%	52.2%	11.6%	62.3%	21.88%	2.09000	10.000	3.05	1.15	24.02	576.37	105.19	0.00	5.25	100%
Short Span Line (SP-9508-3)	9.9	63.75%	52.2%	11.6%	62.3%	21.88%	3.26000	9.000	3.05	1.15	33.71	809.12	147.67	0.00	5.25	100%
Combo Line (SP-9508-3)	9.9	63.75%	52.2%	11.6%	62.3%	21.88%	3.23000	12.000	3.05	1.15	44.54	1068.91	195.08	0.00	5.25	100%
Bridging Line (SP-9508-3)	9.9	63.75%	52.2%	11.6%	62.3%	21.88%	2.10000	10.000	3.05	1.15	24.13	579.13	105.69	0.00	5.25	100%
Deck Line 1 (82500J)	9.1	54.44%	51.3%	3.1%	56.0%	39.55%	1.30000	40.000	0.65	0.29	14.84	356.21	65.01	0.00	0.72	100%
Deck Line 2 (82607)	10.1	46.61%	44.1%	2.5%	53.3%	41.19%	1.30000	40.000	0.54	0.25	13.13	315.13	57.51	0.00	0.61	100%
Deck Line - Edge Coater (SP-10113-2)	9.2	67.02%	55.5%	11.5%	61.5%	23.61%	0.03000	40.000	2.75	1.06	1.27	30.52	5.57	0.00	4.49	100%
State Potential Emissions			**Add worst case coating to all solvents**								**175.98**	**4223.51**	**770.79**	**0.00**		

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used
Note: All coatings are worst case scenario for each line.

Appendix A: Emissions Calculations
HAP Emissions
Surface Coating Activities

Company Name: Nucor Vulcraft Group
Address City IN Zip: 6610 County Road 60, Saint Joe, IN 46785
Permit Number: 033-15749-00027
Plt ID: 033-00027
Reviewer: ERG/AO
Date: 4/15/03

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Hexane	Weight % Toluene	Weight % Ethyl Benzene	Weight % Glycol Ethers	Weight % Tetrachloroethylene	Xylene Emissions (ton/yr)	Hexane Emissions (ton/yr)	Toluene Emissions (ton/yr)	Ethyl Benzene Emissions (ton/yr)	Glycol Ethers Emissions (ton/yr)	Tetrachloroethylene Emissions (ton/yr)
Super Long Span Line (SP-9508-2)	9.9	1.77000	10.000	0.00%	0.00%	0.00%	0.00%	7.00%	0.00%	0.00	0.00	0.00	0.00	53.94	0.0000
Long Span Line (SP-9508-3)	9.9	2.09000	10.000	0.00%	0.00%	0.00%	0.00%	7.00%	0.00%	0.00	0.00	0.00	0.00	63.69	0.00
Short Span Line (SP-9508-3)	9.9	3.26000	9.000	0.00%	0.00%	0.00%	0.00%	7.00%	0.00%	0.00	0.00	0.00	0.00	89.42	0.0000
Combo Line (SP-9508-3)	9.9	3.23000	12.000	0.00%	0.00%	0.00%	0.00%	7.00%	0.00%	0.00	0.00	0.00	0.00	118.13	0.0000
Bridging Line (SP-9508-3)	9.9	2.10000	10.000	0.00%	0.00%	0.00%	0.00%	7.00%	0.00%	0.00	0.00	0.00	0.00	64.00	0.0000
Deck Line 1 (82500J)	9.1	1.30000	40.000	0.00%	0.00%	0.00%	0.00%	3.14%	0.00%	0.00	0.00	0.00	0.00	65.01	0.0000
Deck Line 2 (82607)	10.1	1.30000	40.000	0.00%	0.00%	0.00%	0.00%	2.51%	0.00%	0.00	0.00	0.00	0.00	57.51	0.0000
Deck Line - Edge Coater (SP-10112-2)	9.2	0.03000	40.000	0.00%	0.00%	0.00%	0.00%	2.00%	0.00%	0.00	0.00	0.00	0.00	0.97	0.0000
Total State Potential Emissions										**0.00**	**0.00**	**0.00**	**0.00**	**512.67**	**0.00**

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

Appendix A: Emissions Calculations
Welding and Thermal Cutting

Company Name: Nucor Vulcraft Group
Address City IN Zip: 6610 County Road 60, Saint Joe, IN 46785
CP: 033-15749-00027
Plt ID: 033-00027
Reviewer: ERG/AO
Date: 4/15/03

PROCESS	Number of Stations	Max. electrode consumption per station (lbs/hr)		EMISSION FACTORS* (lb pollutant/lb electrode)				EMISSIONS (lbs/hr)				HAPS (lbs/hr)
WELDING				PM=PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
GMAW	1	512.5		0.0052	0.00318	0.000001	0.000001	2.665	1.630	0.001	0.000513	1.6308
Metal Inert Gas (MIG)(carbon steel)				0.0241	0.000034		0.00001	0.000	0.0000000	0.0000000	0	0.0000
Stick (E7018 electrode)				0.0211	0.0009			0.000	0.000	0.000	0	0.0000
Tungsten Inert Gas (TIG)(carbon steel)				0.0055	0.0005			0.000	0.000	0.000	0	0.0000
Oxyacetylene(carbon steel)				0.0055	0.0005			0.000	0.000	0.000	0	0.0000

	Number of Stations	Max. Metal Thickness Cut (in.)	Max. Metal Cutting Rate (in./minute)	EMISSION FACTORS (lb pollutant/1,000 inches cut, 1" thick)**				EMISSIONS (lbs/hr)				HAPS (lbs/hr)
FLAME CUTTING				PM=PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
Oxyacetylene				0.1622	0.0005	0.0001	0.0003	0.000	0.000	0.000	0.000	0.000
Oxymethane				0.0815	0.0002		0.0002	0.000	0.000	0.000	0.000	0.000
Plasma**				0.0039				0.000	0.000	0.000	0.000	0.000
EMISSION TOTALS												
Potential Emissions lbs/hr								2.6650	1.6298	0.0005	0.0005	1.6308
Potential Emissions lbs/day								63.9600	39.1140	0.0123	0.0123	39.1386
Potential Emissions tons/year								11.6727	7.1383	0.0022	0.0022	7.1428

METHODOLOGY

*Emission Factors are default values for carbon steel unless a specific electrode type is noted in the Process column.

**Emission Factor for plasma cutting from American Welding Society (AWS). Trials reported for wet cutting of 8 mm thick mild steel with 3.5 m/min cutting speed (at 0.2 g/min emitted). Therefore, the emission factor for plasma cutting is for 8 mm thick r

Using AWS average values: (0.25 g/min)/(3.6 m/min) x (0.0022 lb/g)/(39.37 in./m) x (1,000 in.) = 0.0039 lb/1,000 in. cut, 8 mm thick

Plasma cutting emissions, lb/hr: (# of stations)(max. cutting rate, in./min.)(60 min./hr.)(emission factor, lb. pollutant/1,000 in. cut, 8 mm thick)

Cutting emissions, lb/hr: (# of stations)(max. metal thickness, in.)(max. cutting rate, in./min.)(60 min./hr.)(emission factor, lb. pollutant/1,000 in. cut, 1" thick)

Welding emissions, lb/hr: (# of stations)(max. lbs of electrode used/hr/station)(emission factor, lb. pollutant/lb. of electrode used)

Emissions, lbs/day = emissions, lbs/hr x 24 hrs/day

Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/year x 1 ton/2,000 lbs.

Welding and other flame cutting emission factors are from an internal training session document.

Refer to AP-42, Chapter 12.19 for additional emission factors for welding.

Summary Table

Company Name: Nucor Vulcraft Group
Address City IN Zip: 6610 County Road 60, Saint Joe, IN 46785
CP: 033-15749-00027
Plt ID: 033-00027
Reviewer: ERG/AO
Date: 4/15/03

Potential To Emit in Tons/Year

	PM	PM10	SO2	NOx	VOC	CO	Xylene	Hexane	Toluene	Ethylbenzene	Glycol Ethers	Manganese	Nickel	Chromium
Surface Coating	-	-	-	-	770.8	-	-	-	-	-	512.7	-	-	-
Welding	11.7	11.7	-	-	-	-	-	-	-	-	-	7.1	0.0022	0.0022
Totals	**11.7**	**11.7**	**-**	**-**	**770.8**	**-**	**-**	**-**	**-**	**-**	**512.7**	**7.1**	**0.0022**	**0.0022**

Total HAPs **519.8**